The following were donated by Robert T. Lewellen, USDA, ARS, U.S. Agricultural Research Station, 1639 E. Alisal St., Salinas, California 93905, United States. Received 02/25/1994.

#### PI 578079. Beta vulgaris L.

Breeding. C918; 3918; 3918(Sp). Pedigree - Composite crosses and selections within C37 and C46 type germplasm that had genetic ms and Sf incorporated. Rz resistance to rhizomania was also incorporated. Multigerm, self-fertile (Sf), random-mated population facilitated by genetic male sterility (A:aa). Segregates for resistance to rhizomania (Rz). Based upon its pedigree and per se performance, has genetic variability and moderate resistance to virus yellows, curly top, Erwinnia (E. carotovora beta vasculorum), powdery mildew (Erysiphe polygoni) and bolting. An increase through genetic male sterile segregates of S1 lines selected based upon per se performance for nonbolting, disease resistance, and % sucrose. S1 lines from popn-913 and popn-915.

# PI 578080. Beta vulgaris L.

Breeding. C909-34; 3903-34. Pedigree - Increase of an S1 line from popn-909. Popn-909 is similar to C918. Selected on the basis of performance under rhizomania conditions. Narrowly based line with resistance to Erwinia (E. carotovora beta vasculorum), powdery mildew (Erysiphe polygoni), and rhizomania (BNYVV) (Rz). Tolerant to virus yellows (BYV & BWYV) and curly top virus. Moderate resistance to bolting

# PI 578081. Beta vulgaris L.

Breeding. C909-37; 3909-37. Pedigree - Increase of an S1 line from popn-909. Popn-909 is similar to C918. Selected on basis of performance under rhizomania conditions. Sister line to C909-34. Narrowly based with resistance to Erwinia (E. carotovora beta vasculorum), powdery mildew (Erysiphe polygoni), and rhizomania (BNYVV) (Rz). Tolerant to virus yellows (BYV & BWYV) and curly top virus. Moderate resistance to bolting

## PI 578082. Beta vulgaris L.

Breeding. C911-4; 3911-4. Pedigree - From popn-911. Half-sib family selected on basis of resistance to rhizomania, virus yellows, Erwinia, and bolting and for sugar yield performance. Narrowly based line with Rz for resistance to rhizomania (BNYVV). Segregates M:mm. Moderately resistant to Erwinia (E. carotovora beta vasculorum), powdery mildew (Erysiphe polygoni), virus yellows (BYV & BWYV), curly top virus, and bolting. Performance traits good for sugar yield.

#### PI 578083. Beta vulgaris L.

Breeding. C911-12; 3911-12. Pedigree - From popn-911. Half-sib family selected on basis of resistance to rhizomania, virus yellows, Erwinia, and bolting and for sugar yield performance. Sister line to C911-4. Narrowly based with Rz for resistance to rhizomania (BNYVV). Segregates M:mm. Moderately resistant to Erwinia (E. carotovora beta vasculorum), powdery mildew (Erysiphe polygoni), virus yellows (BYV & BWYV), curly top virus, and bolting. Performance traits good for sugar yield.

#### PI 578084. Beta vulgaris L.

Breeding. C911-14; 3911-14. Pedigree - From popn-911. Half-sib family selected on basis of resistance to rhizomania, virus yellows, Erwinia, and bolting and for sugar yield performance. Sister line to C911-4. Narrowly based with Rz for resistance to rhizomania (BNYVV). Segregates M:mm. Moderately resistant to Erwinia (E. carotovora beta vasculorum), powdery mildew (Erysiphe polygoni), virus yellows (BYV & BWYV), curly top virus, and bolting. Performance traits good for sugar yield.